

- Segal, Sanford, *University of Rochester, Rochester, NY*  
 Shahriari, Shahriar, *Pomona College, Claremont, CA*  
 Smiley, Leonard, *University of Alaska, Anchorage, AK*  
 Smith, David, *Duke University, Durham, NC*  
 Snell, J. Laurie, *Dartmouth College, Hanover, NH*  
 Stark, Harold, *University of California, San Diego, LaJolla, CA*  
 Straffin, Jr., Philip, *Beloit College, Beloit, WI*  
 Tanis, Elliot, *Hope College, Holland, MI*  
 Van Brummelen, Glen, *The King's University College, Edmonton, Alberta, Canada*  
 Wagon, Stan, *Macalester College, St. Paul, MN*  
 Wetzel, John, *University of Illinois, Urbana, IL*  
 Williams, Kenneth, *Carleton University, Ottawa, Ontario, Canada*  
 Wong, Roman, *Washington & Jefferson College, Washington, PA*  
 Yang, Kung-Wei, *Western Michigan University, Kalamazoo, MI*

## Index to Volume 70

### AUTHORS

- Abu-Saymeh, Sadi; Hajja, Mowaffaq, *On the Fermat-Torricelli Points of Tetrahedra and of Higher Dimensional Simplexes*, 372-378  
 Aigner, Martin, *Moving into the Desert with Fibonacci*, 11-21  
 Anderson, Bruce B., *Where the Inflection Points of a Polynomial May Lie*, 32-39  
 Baker, John A.; Sluis, Willem, *Arg*, 291  
 Beauregard, Raymond A.; Suryanarayan, E.R., *Arithmetic Triangles*, 105-115  
 Benson, Steve, *Students Ask the Darnedest Things: A Result in Elementary Group Theory*, 207-211  
 Blatter, Christian, *Another Proof of Pick's Area Theorem*, 200  
 Bóna, Miklós, *A New Proof of the Formula for the Number of  $3 \times 3$  Magic Squares*, 201-203  
 Brams, Steven J., see Kilgour, D. Marc  
 Bryant, Jennifer; Kuzmanovich, James; Pavlichenkov, Andrey, *Functions with Compact Preimages of Compact Sets*, 362-364  
 Burns, Anne M., *"Persian" Recursion*, 196-199  
 Ceglarek, Nicholas, see Fishback, Paul  
 Chen, Guantao; Rao, M. Bhaskara; Shreve, Warren E., *Can One Load a Set of Dice So That the Sum Is Uniformly Distributed?*, 204-206  
 Cipra, Barry, see Groetsch, C.W.  
 Cruz-Urbe, David, *The Relation Between the Root and Ratio Tests*, 214-215.  
 Dennis, David, *René Descartes' Curve-Drawing Devices: Experiments in the Relations Between Mechanical Motion and Symbolic Language*, 163-174  
 Dobbs, David E., *Thales Meets Poincaré*, 185-195  
 Edwards, Constance C.; Sangsiri, Prashant S., *Proof Without Words: The Distributive Property of the Triple Scalar Product*, 136  
 Emert, John; Nelson, Roger, *Volume and Surface Area for Polyhedra and Polytopes*, 365-371  
 Fan, C. Kenneth; Poonen, Bjorn; Poonen, George, *How to Spread Rumors Fast*, 40-42  
 Fay, Temple H., *A Study in Step Size*, 116-117

- Segal, Sanford, *University of Rochester, Rochester, NY*  
 Shahriari, Shahriar, *Pomona College, Claremont, CA*  
 Smiley, Leonard, *University of Alaska, Anchorage, AK*  
 Smith, David, *Duke University, Durham, NC*  
 Snell, J. Laurie, *Dartmouth College, Hanover, NH*  
 Stark, Harold, *University of California, San Diego, LaJolla, CA*  
 Straffin, Jr., Philip, *Beloit College, Beloit, WI*  
 Tanis, Elliot, *Hope College, Holland, MI*  
 Van Brummelen, Glen, *The King's University College, Edmonton, Alberta, Canada*  
 Wagon, Stan, *Macalester College, St. Paul, MN*  
 Wetzel, John, *University of Illinois, Urbana, IL*  
 Williams, Kenneth, *Carleton University, Ottawa, Ontario, Canada*  
 Wong, Roman, *Washington & Jefferson College, Washington, PA*  
 Yang, Kung-Wei, *Western Michigan University, Kalamazoo, MI*

## Index to Volume 70

### AUTHORS

- Abu-Saymeh, Sadi; Hajja, Mowaffaq, *On the Fermat-Torricelli Points of Tetrahedra and of Higher Dimensional Simplexes*, 372-378  
 Aigner, Martin, *Moving into the Desert with Fibonacci*, 11-21  
 Anderson, Bruce B., *Where the Inflection Points of a Polynomial May Lie*, 32-39  
 Baker, John A.; Sluis, Willem, *Arg*, 291  
 Beauregard, Raymond A.; Suryanarayan, E.R., *Arithmetic Triangles*, 105-115  
 Benson, Steve, *Students Ask the Darnedest Things: A Result in Elementary Group Theory*, 207-211  
 Blatter, Christian, *Another Proof of Pick's Area Theorem*, 200  
 Bóna, Miklós, *A New Proof of the Formula for the Number of  $3 \times 3$  Magic Squares*, 201-203  
 Brams, Steven J., see Kilgour, D. Marc  
 Bryant, Jennifer; Kuzmanovich, James; Pavlichenkov, Andrey, *Functions with Compact Preimages of Compact Sets*, 362-364  
 Burns, Anne M., *"Persian" Recursion*, 196-199  
 Ceglarek, Nicholas, see Fishback, Paul  
 Chen, Guantao; Rao, M. Bhaskara; Shreve, Warren E., *Can One Load a Set of Dice So That the Sum Is Uniformly Distributed?*, 204-206  
 Cipra, Barry, see Groetsch, C.W.  
 Cruz-Urbe, David, *The Relation Between the Root and Ratio Tests*, 214-215.  
 Dennis, David, *René Descartes' Curve-Drawing Devices: Experiments in the Relations Between Mechanical Motion and Symbolic Language*, 163-174  
 Dobbs, David E., *Thales Meets Poincaré*, 185-195  
 Edwards, Constance C.; Sangsiri, Prashant S., *Proof Without Words: The Distributive Property of the Triple Scalar Product*, 136  
 Emert, John; Nelson, Roger, *Volume and Surface Area for Polyhedra and Polytopes*, 365-371  
 Fan, C. Kenneth; Poonen, Bjorn; Poonen, George, *How to Spread Rumors Fast*, 40-42  
 Fay, Temple H., *A Study in Step Size*, 116-117

- Fishback, Paul; Ceglarek, Nicholas; Moleski, Tobias, *On the Differentiability of  $\int_0^x \sin(1/t) dt$  and  $\int_0^x \sin(\ln t) dt$* , 218-222
- Frenzen, C.L., *Proof Without Words: Sums of Consecutive Positive Integers*, 294
- Groetsch, C.W.; Cipra, Barry, *Halley's Comment—Projectiles With Linear Resistance*, 273-280
- Growney, JoAnne, *Mathematics Teachers*, 272
- Hajja, Mowaffaq, see Abu-Saymeh, Sadi
- Haunsperger, Deanna B.; Kennedy, Stephen F., *Proof Without Words: Counting Cannonballs*, 46
- Heuer, Gerald A., *More on the Thinned-Out Harmonic Series*, 43-45
- Hilton, Peter; Pedersen, Jean; Walser, Hans, *The Faces of the Tri-Hexaflexagon*, 243-251
- Hirschhorn, M., *The Volume of a Cone, Without Calculus*, 295-296
- Hoenigman, Rebecca L., see Watkins, John J.
- Jeffrey, D.J., *Formulae, Algorithms, and Quartic Extrema*, 341-348
- Kalman, Dan; Mena, Robert; Shahriari, Shahriar, *Variations on an Irrational Theme—Geometry, Dynamics, Algebra*, 93-104
- Kennedy, Stephen F., see Haunsperger, Deanna B.
- Kilgour, D. Marc; Brams, Steven J., *The Truel*, 315-326
- Kuzmanovich, James, see Bryant, Jennifer
- McDonnell, Michael M., see Margerum, Eugene A.
- Margerum, Eugene A.; McDonnell, Michael M., *Proof Without Words: Construction of Two Lunes with Combined Area Equal to That of a Given Right Triangle*, 380
- Melissen, Hans, *Loosest Circle Coverings of an Equilateral Triangle*, 118-124
- Memory, J.D., *Bell's Conjecture*, 203
- Mena, Robert, see Kalman, Dan
- Moleski, Tobias, see Fishback, Paul
- Morales, Luis B., *Scheduling a Bridge Club by Tabu Search*, 287-290
- Mueller, William, *Centers of Triangles of Fixed Center: Adventures in Undergraduate Research*, 252-262
- Mulvey, Irene, *Recurrent Ideas in Number Theory: The Multiple Birkhoff Recurrence Theorem Used to Prove van der Waerden's Theorem*, 358-361
- Nelsen, Roger B., *Proof Without Words: The Sum of the Squares of Consecutive Triangular Numbers Is Triangular*, 130
- Nelson, Roger; see Emert, John
- Palagallo, Judith A.; Price, Thomas E., *Some Remarks on the Evaluation of  $\int dt/(t^m + 1)$* , 59-63
- Pavlichenkov, Andrey, see Bryant, Jennifer
- Pedersen, Jean, see Hilton, Peter
- Peifer, David, *An Introduction to Combinatorial Group Theory and the Word Problem*, 3-10
- Poonen, Bjorn, see Fan, C. Kenneth
- Poonen, George, see Fan, C. Kenneth
- Price, Thomas E., see Palagallo, Judith A.
- Propp, James, *A Pedestrian Approach To a Method of Conway, or, A Tale of Two Cities*, 327-340
- Rao, M. Bhaskara, see Chen, Guantao
- Richey, Melissa, *Mapping the Cantor Set onto  $[0, 1]$* , 57-58
- Saari, Donald G., *Are Individual Rights Possible?*, 83-92
- Sakmar, I.A., *Proof Without Words: Sums of Squares*, 212
- Sansgiry, Prashant S., see Edwards, Constance C.
- Schmidt, Jr., Harvey, *How (Knot?) to Play Hangman*, 137-140
- Shahriari, Shahriar, see Kalman, Dan
- Shirali, Shailesh A., *A Family Portrait of Primes—A Case Study in Discrimination*, 263-272
- Shreve, Warren E., see Chen, Guantao
- Simpson, R.J., *Scheduling a Bridge Club Using a Genetic Algorithm*, 281-286
- Sinefakopoulos, Achilleas, *On Groups of Order  $p^2$* , 212-213
- Sluis, Willem, see Baker, John A.
- Steinbach, Peter, *Golden Fields: A Case for the Heptagon*, 22-31
- Supowit, Kenneth J., *Understanding the Extra Power of the Newton-Cotes Formula for Even Degree*, 292-293
- Suryanarayan, E.R., see Beauregard, Raymond A.

- Tan, Barış. *Markov Chains and the RISK Board Game*, 349–357
- Velleman, Daniel J., *Another Proof of the Fundamental Theorem of Algebra*, 216–217
- Walser, Hans, see Hilton, Peter
- Watkins, John J.; Hoenigman, Rebecca L., *Knight's Tours on a Torus*, 175–184
- Wetzel, John E., *The Smallest Equilateral Cover for Triangles of Perimeter Two*, 125–130
- Williams, Kenneth S., *Bernoulli's Identity Without Calculus*, 47–50
- Woon, S.C., *A Tree for Generating Bernoulli Numbers*, 51–56
- Yang, Kung-Wei, *A Basis for the Intersection of Subspaces*, 297
- Yang, Kung-Wei, *Fibonacci With a Golden Ring*, 131–135
- Zeilberger, Doron, *Math Bite: Proof of an Empirical Observation Made by a Character of Amos Oz*, 291
- Zerger, Monte J., *Math Bite: 1, 2, 3, Facetiae*, 379
- $\int_0^x \sin(\ln t) dt$ , On the, by Paul Fishback, Nicholas Ceglarek, and Tobias Moleski, 218–222
- Faces of the Tri-Hexaflexagon, The, by Peter Hilton, Jean Pedersen, and Hans Walser, 243–251
- Family Portrait of Primes—A Case Study in Discrimination, A, by Shailesh A. Shirali, 263–272
- Fermat–Torricelli Points of Tetrahedra and of Higher Dimensional Simplexes, On the, by Sadi Abu-Sayme and Mowaffaq Hajja, 372–378
- Fibonacci With a Golden Ring, by Kung-Wei Yang, 131–135
- Formulae, Algorithms, and Quartic Extrema, by D.J. Jeffrey, 341–348
- Functions with Compact Preimages of Compact Sets, by Jennifer Bryant, James Kuzmanovich, and Andrey Pavlichenkov, 362–364
- Golden Fields: A Case for the Heptagon, by Peter Steinbach, 22–31
- Groups of Order  $p^2$ , On, by Achilles Sinejakopoulos, 212–213
- Halley's Comment—Projectiles With Linear Resistance, by C.W. Groetsch and Barry Cipra, 273–280
- How (Knot?) to Play Hangman, by Harvey Schmidt, Jr., 137–140
- How to Spread Rumors Fast, by C. Kenneth Fan, Bjorn Poonen, and George Poonen, 40–42
- Introduction to Combinatorial Group Theory and the Word Problem, An, by David Peifer, 3–10
- Knight's Tours on a Torus, by John J. Watkins and Rebecca L. Hoenigman, 175–184
- Loosest Circle Coverings of an Equilateral Triangle, by Hans Melissen, 118–124
- Mapping the Cantor Set onto  $[0, 1]$ , by Melissa Richey, 57–58
- Markov Chains and the RISK Board Game, by Barış Tan, 349–357
- Math Bite: 1, 2, 3, Facetiae, by Monte J. Zerger, 379
- Math Bite: Proof of an Empirical Observation Made by a Character of Amos Oz, by Doron Zeilberger, 291

## TITLES

- Another Proof of Pick's Area Theorem, by Christian Blatter, 200
- Another Proof of the Fundamental Theorem of Algebra, by Daniel J. Velleman, 216–217
- Are Individual Rights Possible?, by Donald G. Saari, 83–92
- Arg, by John A. Baker and Willem Sluis, 291
- Arithmetic Triangles, by Raymond Beauregard and E.R. Suryanarayan, 105–115
- Basis for the Intersection of Subspaces, A, by Kung-Wei Yang, 297
- Bell's Conjecture, by J.D. Memory, 203
- Bernoulli's Identity Without Calculus, by Kenneth S. Williams, 47–50
- Can One Load a Set of Dice So That the Sum Is Uniformly Distributed?, by Guantao Chen, M. Bhaskara Rao, and Warren E. Shreve, 204–206
- Centers of Triangles of Fixed Center: Adventures in Undergraduate Research, by William Mueller, 252–262
- Differentiability of  $\int_0^x \sin(1/t) dt$  and

- Mathematics Teachers, by JoAnne Growney, 272
- More on the Thinned-Out Harmonic Series, by Gerald A. Heuer, 43-45
- Moving into the Desert with Fibonacci, by Martin Aigner, 11-21
- New Proof of the Formula for the Number of  $3 \times 3$  Magic Squares, A, by Miklós Bóna, 201-203
- Pedestrian Approach To a Method of Conway, or, A Tale of Two Cities, A, by James Propp, 327-340
- "Persian" Recursion, by Anne M. Burns, 196-199
- Proof Without Words: Construction of Two Lunes with Combined Area Equal to That of a Given Right Triangle, by Eugene A. Margerum and Michael M. McDonnell, 380
- Proof Without Words: Counting Cannonballs, by Deanna B. Haunsperger and Stephen F. Kennedy, 46
- Proof Without Words: Sums of Consecutive Positive Integers, by C.L. Frenzen, 294
- Proof Without Words: Sums of Squares, by I.A. Sakmar, 212
- Proof Without Words: The Distributive Property of the Triple Scalar Product, by Constance C. Edwards and Prashant S. Sansgiry, 136
- Proof Without Words: The Sum of the Squares of Consecutive Triangular Numbers Is Triangular, by Roger B. Nelsen, 130
- Recurrent Ideas in Number Theory: The Multiple Birkhoff Recurrence Theorem Used to Prove van der Waerden's Theorem, by Irene Mulvey, 358-361
- Relation Between the Root and Ratio Tests, The, by David Cruz-Urbe, 214-215
- René Descartes' Curve-Drawing Devices: Experiments in the Relations Between Mechanical Motion and Symbolic Language, by David Dennis, 163-174
- Scheduling a Bridge Club by Tabu Search, by Luis B. Morales, 287-290
- Scheduling a Bridge Club Using a Genetic Algorithm, by R.J. Simpson, 281-286
- Smallest Equilateral Cover for Triangles of Perimeter Two, The, by John E. Wetzel, 125-130
- Some Remarks on the Evaluation of  $\int \frac{dt}{t^m+1}$ , by Judith A. Palagallo and Thomas E. Price, 59-63
- Students Ask the Darnedest Things: A Result in Elementary Group Theory, by Steve Benson, 207-211
- Study in Step Size, A, by Temple H. Fay, 116-117
- Thales Meets Poincaré, by David E. Dobbs, 185-195
- Tree for Generating Bernoulli Numbers, A, by S.C. Woon, 51-56
- Truel, The, by Marc Kilgour and Steven J. Brams, 315-326
- Understanding the Extra Power of the Newton-Cotes Formula for Even Degree, by Kenneth J. Supowit, 292-293
- Variations on an Irrational Theme—Geometry, Dynamics, Algebra, by Dan Kalman, Robert Mena, and Shahriar Shahriari, 93-104
- Volume and Surface Area for Polyhedra and Polytopes, by John Emert and Roger Nelson, 365-371
- Volume of a Cone, Without Calculus, The, by M. Hirschhorn, 295-296
- Where the Inflection Points of a Polynomial May Lie, by Bruce B. Anderson, 32-39

## PROBLEMS

The letters P, Q, and S refer to Proposals, Quickies, and Solutions, respectively; page numbers appear in parentheses. For example, P1516(64) refers to Proposal 1516, which appears on page 64.

February: P1514-1518; Q859-861; S1489-1493

April: P1519-1523; Q862-864; S1494-1498

June: P1524-1528; Q865-867; S1499-1503

October: P1529-1533; Q868-870; S1504-1508

December: P1534-1538; Q871-873; S1509-1513

Abad, Jack C., S1501(226)

Andreoli, Michael, Q865(224)

Baker, Matt and Singer, Nicholas C., S1508(304)

- Barbara, Roy, S1512(387)  
 Beasley, Brian D., S1510(384)  
 Bencze, Mihály, S1497(147)  
 Binz, J.C., P1527(224)  
 Bivens, Irl C., S1512(386)  
 —, and Klein, Benjamin G., S1490(67)  
 Bonomo, John, Q862(142)  
 Bradley, David, Q860(66)  
 Brillhart, John and Lomont, J.S., Q870(300)  
 Callan, David, Q861(66)  
 —, Q867(224)  
 —, S1502(227)  
 Chao, Wu Wei, P1521(141)  
 —, P1526(224)  
 Chen, Hongwei and Klamkin, Murray S., S1496(145)  
 Christopher, John, S1504(300)  
 Con Amore Problem Group and Minh, Can A., S1506(302)  
 Deutsch, Emeric, P1523(142)  
 —, P1525(223)  
 —, P1536(382)  
 Doster, David, P1516(64)  
 Doucette, Robert L., S1491(68)  
 — and Gaskin, Joseph G., S1505(301)  
 Flood, Tim, S1509(384)  
 Foster, L.L., S1511(385)  
 Frame, J.S. and Klein, Benjamin G., S1492(69)  
 Gaskin, Joseph G., see Doucette, Robert L.  
 Grossman, Jerrold W., P1537(382)  
 Gülicher, Herbert, P1532(299)  
 —, Q871(382)  
 Hoehn, Larry, Q866(224)  
 —, Q869(299)  
 Jager, Thomas, S1489(66)  
 Kay, David C., P1529(298)  
 Kitchen, Edward, P1518(65)  
 Klamkin, Murray S., Q863(142)  
 —, P1538(382)  
 —, see Chen, Hongwei  
 Klein, Benjamin G., see Bivens, Irl C.  
 —, see Frame, J.S.  
 Kotkowski, Bogdan, P1522(142)  
 Knuth, Donald, P1534(381)  
 Kutsenok, Victor, P1520(141)  
 Larson, Loren C., S1513(387)  
 Lau, Kee-Wai, S1499(225)  
 Lomont, J.S., see Brillhart, John  
 Lossers, O.P., S1493(70)  
 Marston, Helen M. and Noltie, Stephen, S1494(143)  
 Minh, Can A., see Con Amore Problem Group  
 Noltie, Stephen, see Marston, Helen M.  
 Northshield, Sam, P1519(141)  
 Ovchinnikov, Sergei, P1535(381)  
 Pirvănescu, Florin S., P1528(224)  
 Rey, Joaquín Gómez, P1533(299)  
 Rosenberg, Joel, S1498(148)  
 Schindler, Volkhard and Zerger, Ted, S1500(225)  
 Schmeichel, Edward, S1503(228)  
 Schwenk, Allen J., P1530(298)  
 Sillke, Torsten and Wardlaw, William P., Q873(382)  
 Singer, Nicholas C., see Baker, Matt  
 Sofair, Isaac, P1515(64)  
 Sorensen, Claus Mazanti, P1531(299)  
 Straffin, Philip D., S1509(383)  
 Vanden Eynden, Charles, P1517(65)  
 —, Q872(382)  
 Vowe, Michael, S1495(144)  
 Wardlaw, William P., see Sillke, Torsten  
 Wee, Hoe Teck, P1514(64)  
 —, Q868(299)  
 Woltermann, Michael, S1507(303)  
 Yang, Kung-Wei, Q864(143)  
 Yu, Jimmy, see Yu, Sammy  
 Yu, Sammy and Yu, Jimmy, Q859(65)  
 Zerger, Ted, P1524(223)  
 —, see Schindler, Volkhard



